Chapter 13

Estimating Visitors’ Willingness to Pay for Lake Conservation: A Contingent Valuation Study of Pashan Lake, Pune, India

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ABSTRACT

The ecosystem benefits associated with the lakes in an urban area may degrade because of recreational and other anthropogenic activities. Pashan Lake has been a victim of many human development and recreation activities presented in this study and therefore calls for serious restoration and its conservation and recommendations for urban local bodies. The ill-effects of poor management of the lake and health of lake were deliberated through the visitors’ survey. The objective of the study is to determine the willingness of people to pay towards conservation of Pashan Lake and estimating visitors’ WTP for the entrance fee to the lake using the contingent valuation method. The decision to introduce entry fees can be a measure to safeguard the Pashan Lake conservation and part of the management decisions. Proper management of the lake must be ensured to remove all the threats to the natural biodiversity of the lake and its ecosystem.

INTRODUCTION

Over the recent decades, there has been an increasing debate about the conservation of wetlands and other natural resources. The advances in understanding of peoples’ behaviour and perception towards water resources valuation is a tool which offers all needed information on the value of water quality and such values may have in influencing effective public policies related to environment. Such economic valuation of water resources provides alternative uses helping in decision making by authorities (Halkos

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& Matsiori, 2014; Saliba et al.,1987). The wetlands provide many important services to human society (ten Brink et al., 2012). India has a wealth of wetland ecosystems that support diverse and unique habitats. These wetlands provide numerous ecological goods and services but are under tremendous stress due to various anthropogenic and industrial intensification (Bassi et al., 2014). Thus, the declining water qualities in wetlands are issues of concern for India. While revealing the status of wetlands of India, Bassi et al., 2014 stated that the problem of deteriorating water quality is particularly more alarming in the case of small water bodies such as lakes, tanks and ponds. Despite of crucial ecological and economic importance of wetland many stakeholders claims stake in them but rarely are willing to pay for this extractive use often ignored by the decision- makers too (Verma, 2001). Land development and urban infrastructure straggling alongside the wetlands are imposing pressure on provisions of such public services, are stressing local ecosystems and environmental benefits (Daniels and Daniels, 2003; McDonald et al., 2009). Many scholars pointed the concerns over environmental degradation motives, local initiatives to regulate growth and to protect the environment (Myers and Puentes, 2001; Marcouiller et al., 2002; Bengston et al., 2004). Most scholars suggest payments for ecosystem services (PES) as a tool for managing ecosystems and their associated ecological or environmental and economic services (Ferraro, 2001). Lakes situated at the centre of urban settlement play a vital role in the environment and biodiversity preservation for urban settlements as well. For such lake ecosystems in the urban areas, payments of environmental services are important and plays vital role. PES structures can act as a crucial tool for sustainable management (Rosa et al., 2004; Milon and Scrogin, 2006; Engel et al., 2008; Mombo et al., 2014). Understanding local attitudes, tourist behaviour, pertinent conservation issues, serves as understanding motivations. These are important for urban biodiversity conservation projects (Walpole and Goodwin, 2001; Chen & Jim, 2010).

This study first seeks to assess the economic value that visitors’ placed for the purpose of Pashan Lake conservation. The study evoked the amount visitors’ were willing to pay to conserve the lake. The conservation price is estimated through the value visitors agreed to pay for the entry fees to the Pashan lake area. The survey conjointly evoked the benefits of conserving a lake and investigating the variables that could be accustomed to model this economic valuation. The study indicates the motivational factors and willingness- to – pay for the urban lake biodiversity due to urban stresses and tourism growth, and finally highlighting the theoretical and practical implications.

Conceptual Framework

Lake ecosystems give goods and intangible benefits (services) resources for mankind (Mombo et al., 2014). However, the over exploitation of resources and unsustainable use of products and services provided by the lake in the urban settlement has impact on the ecological functions of the lake ecosystem each in terms of quality and quantity of water. This creates externalities on the urban stakeholders who are directly reaping benefits (direct or in-direct use) to the exploitation of the ecosystem goods. The quality indicators of the lake and the level of deterioration can be determined through the economic valuation approaches. Ecotourism must not only create events that attract visitors but activities that will give the visitors an opportunity to interact with the nature so that the value of safeguarding the natural environment is inculcated into the society, while letting the local citizens and future visitors to continue enjoy the natural aesthetics. It then helps to develop a sustainable standard of living for the natives (Mirsanjari, 2012). The contingent valuation method (CVM) approach using willingness-to- pay (WTP) is one such instrument which gives a fair idea of deterioration and current quality of the lake.